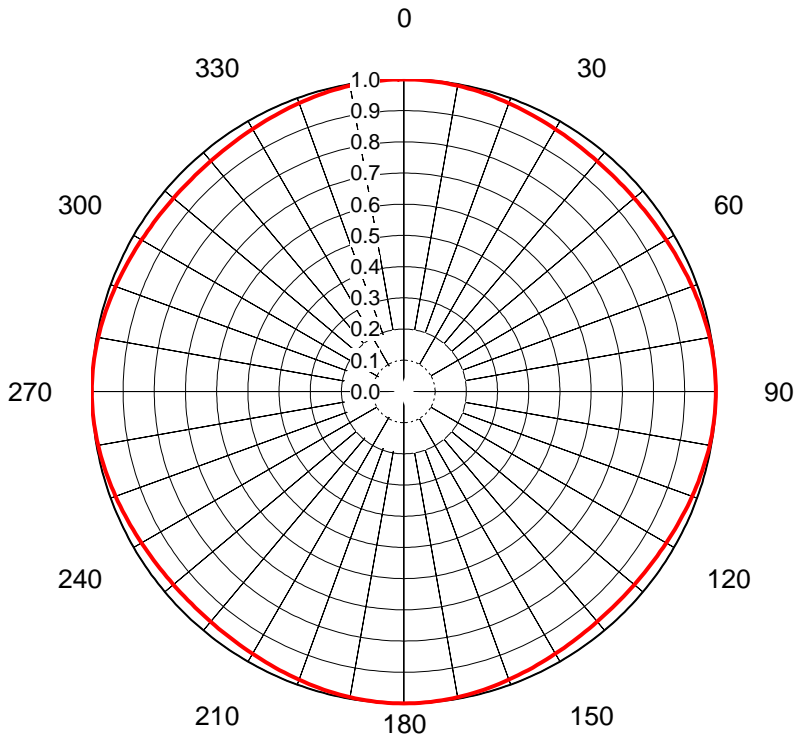


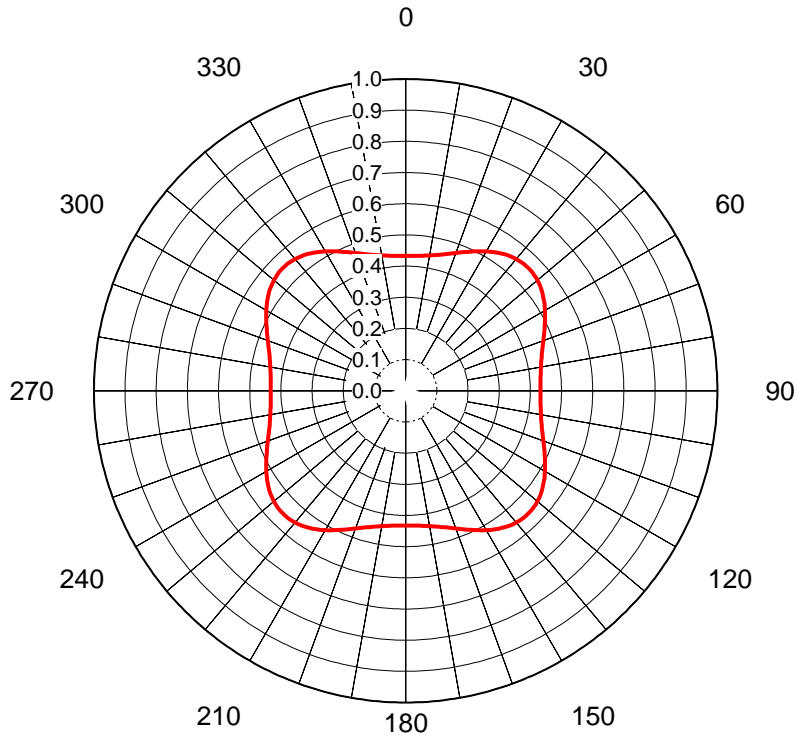
AZIMUTH PATTERN Horizontal Polarization



Proposal No. **c-80028-**
 Date **31-Mar-23**
 Call Letters **NEW**
 Channel **15**
 Frequency **479 MHz**
 Antenna Type **TFU-24ETT/VP-R O4**
 Gain **1.04 (0.17dB)**
 Calculated
 Circularity **+/- 1.0 dB**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	1.000	36	0.966	72	0.986	108	0.986	144	0.966	180	1.000	216	0.966	252	0.986	288	0.986	324	0.966
1	1.000	37	0.965	73	0.987	109	0.985	145	0.966	181	1.000	217	0.965	253	0.987	289	0.985	325	0.966
2	1.000	38	0.965	74	0.988	110	0.983	146	0.967	182	1.000	218	0.965	254	0.988	290	0.983	326	0.967
3	1.000	39	0.964	75	0.990	111	0.982	147	0.968	183	1.000	219	0.964	255	0.990	291	0.982	327	0.968
4	0.999	40	0.964	76	0.991	112	0.981	148	0.969	184	0.999	220	0.964	256	0.991	292	0.981	328	0.969
5	0.999	41	0.963	77	0.992	113	0.979	149	0.970	185	0.999	221	0.963	257	0.992	293	0.979	329	0.970
6	0.998	42	0.963	78	0.993	114	0.978	150	0.971	186	0.998	222	0.963	258	0.993	294	0.978	330	0.971
7	0.998	43	0.963	79	0.994	115	0.977	151	0.972	187	0.998	223	0.963	259	0.994	295	0.977	331	0.972
8	0.997	44	0.963	80	0.995	116	0.976	152	0.973	188	0.997	224	0.963	260	0.995	296	0.976	332	0.973
9	0.996	45	0.963	81	0.996	117	0.974	153	0.974	189	0.996	225	0.963	261	0.996	297	0.974	333	0.974
10	0.995	46	0.963	82	0.997	118	0.973	154	0.976	190	0.995	226	0.963	262	0.997	298	0.973	334	0.976
11	0.994	47	0.963	83	0.998	119	0.972	155	0.977	191	0.994	227	0.963	263	0.998	299	0.972	335	0.977
12	0.993	48	0.963	84	0.998	120	0.971	156	0.978	192	0.993	228	0.963	264	0.998	300	0.971	336	0.978
13	0.992	49	0.963	85	0.999	121	0.970	157	0.979	193	0.992	229	0.963	265	0.999	301	0.970	337	0.979
14	0.991	50	0.964	86	0.999	122	0.969	158	0.981	194	0.991	230	0.964	266	0.999	302	0.969	338	0.981
15	0.990	51	0.964	87	1.000	123	0.968	159	0.982	195	0.990	231	0.964	267	1.000	303	0.968	339	0.982
16	0.988	52	0.965	88	1.000	124	0.967	160	0.983	196	0.988	232	0.965	268	1.000	304	0.967	340	0.983
17	0.987	53	0.965	89	1.000	125	0.966	161	0.985	197	0.987	233	0.965	269	1.000	305	0.966	341	0.985
18	0.986	54	0.966	90	1.000	126	0.966	162	0.986	198	0.986	234	0.966	270	1.000	306	0.966	342	0.986
19	0.985	55	0.966	91	1.000	127	0.965	163	0.987	199	0.985	235	0.966	271	1.000	307	0.965	343	0.987
20	0.983	56	0.967	92	1.000	128	0.965	164	0.988	200	0.983	236	0.967	272	1.000	308	0.965	344	0.988
21	0.982	57	0.968	93	1.000	129	0.964	165	0.990	201	0.982	237	0.968	273	1.000	309	0.964	345	0.990
22	0.981	58	0.969	94	0.999	130	0.964	166	0.991	202	0.981	238	0.969	274	0.999	310	0.964	346	0.991
23	0.979	59	0.970	95	0.999	131	0.963	167	0.992	203	0.979	239	0.970	275	0.999	311	0.963	347	0.992
24	0.978	60	0.971	96	0.998	132	0.963	168	0.993	204	0.978	240	0.971	276	0.998	312	0.963	348	0.993
25	0.977	61	0.972	97	0.998	133	0.963	169	0.994	205	0.977	241	0.972	277	0.998	313	0.963	349	0.994
26	0.976	62	0.973	98	0.997	134	0.963	170	0.995	206	0.976	242	0.973	278	0.997	314	0.963	350	0.995
27	0.974	63	0.974	99	0.996	135	0.963	171	0.996	207	0.974	243	0.974	279	0.996	315	0.963	351	0.996
28	0.973	64	0.976	100	0.995	136	0.963	172	0.997	208	0.973	244	0.975	280	0.995	316	0.963	352	0.997
29	0.972	65	0.977	101	0.994	137	0.963	173	0.998	209	0.972	245	0.977	281	0.994	317	0.963	353	0.998
30	0.971	66	0.978	102	0.993	138	0.963	174	0.998	210	0.971	246	0.978	282	0.993	318	0.963	354	0.998
31	0.970	67	0.979	103	0.992	139	0.963	175	0.999	211	0.970	247	0.979	283	0.992	319	0.963	355	0.999
32	0.969	68	0.981	104	0.991	140	0.964	176	0.999	212	0.969	248	0.981	284	0.991	320	0.964	356	0.999
33	0.968	69	0.982	105	0.990	141	0.964	177	1.000	213	0.968	249	0.982	285	0.990	321	0.964	357	1.000
34	0.967	70	0.983	106	0.988	142	0.965	178	1.000	214	0.967	250	0.983	286	0.988	322	0.965	358	1.000
35	0.966	71	0.985	107	0.987	143	0.965	179	1.000	215	0.966	251	0.985	287	0.987	323	0.965	359	1.000

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AZIMUTH PATTERN Vertical Polarization

Proposal No. **c-80028-**
 Date **31-Mar-23**
 Call Letters **NEW**
 Channel **15**
 Frequency **479 MHz**
 Antenna Type **TFU-24ETT/VP-R O4**
 Gain **1.29 (1.12dB)**
 Calculated
 Circularity **+/- 2.0 dB**

Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value	Deg	Value
0	0.433	36	0.541	72	0.462	108	0.462	144	0.541	180	0.433	216	0.541	252	0.462	288	0.462
1	0.433	37	0.544	73	0.459	109	0.466	145	0.537	181	0.433	217	0.544	253	0.459	289	0.466
2	0.433	38	0.547	74	0.456	110	0.470	146	0.533	182	0.433	218	0.547	254	0.456	290	0.470
3	0.433	39	0.550	75	0.453	111	0.474	147	0.529	183	0.433	219	0.550	255	0.453	291	0.474
4	0.434	40	0.552	76	0.450	112	0.479	148	0.525	184	0.434	220	0.552	256	0.450	292	0.479
5	0.434	41	0.554	77	0.447	113	0.483	149	0.521	185	0.434	221	0.554	257	0.447	293	0.483
6	0.435	42	0.555	78	0.445	114	0.488	150	0.516	186	0.435	222	0.555	258	0.445	294	0.488
7	0.436	43	0.556	79	0.443	115	0.492	151	0.511	187	0.436	223	0.556	259	0.443	295	0.492
8	0.438	44	0.557	80	0.441	116	0.497	152	0.507	188	0.438	224	0.557	260	0.441	296	0.497
9	0.439	45	0.557	81	0.439	117	0.502	153	0.502	189	0.439	225	0.557	261	0.439	297	0.502
10	0.441	46	0.557	82	0.438	118	0.507	154	0.497	190	0.441	226	0.557	262	0.438	298	0.507
11	0.443	47	0.556	83	0.436	119	0.511	155	0.492	191	0.443	227	0.556	263	0.436	299	0.511
12	0.445	48	0.555	84	0.435	120	0.516	156	0.488	192	0.445	228	0.555	264	0.435	300	0.516
13	0.447	49	0.554	85	0.434	121	0.521	157	0.483	193	0.447	229	0.554	265	0.434	301	0.521
14	0.450	50	0.552	86	0.434	122	0.525	158	0.479	194	0.450	230	0.552	266	0.434	302	0.525
15	0.453	51	0.550	87	0.433	123	0.529	159	0.474	195	0.453	231	0.550	267	0.433	303	0.529
16	0.456	52	0.547	88	0.433	124	0.533	160	0.470	196	0.456	232	0.547	268	0.433	304	0.533
17	0.459	53	0.544	89	0.433	125	0.537	161	0.466	197	0.459	233	0.544	269	0.433	305	0.537
18	0.462	54	0.541	90	0.433	126	0.541	162	0.462	198	0.462	234	0.541	270	0.433	306	0.541
19	0.466	55	0.537	91	0.433	127	0.544	163	0.459	199	0.466	235	0.537	271	0.433	307	0.544
20	0.470	56	0.533	92	0.433	128	0.547	164	0.456	200	0.470	236	0.533	272	0.433	308	0.547
21	0.474	57	0.529	93	0.433	129	0.550	165	0.453	201	0.474	237	0.529	273	0.433	309	0.550
22	0.479	58	0.525	94	0.434	130	0.552	166	0.450	202	0.479	238	0.525	274	0.434	310	0.552
23	0.483	59	0.521	95	0.434	131	0.554	167	0.447	203	0.483	239	0.521	275	0.434	311	0.554
24	0.488	60	0.516	96	0.435	132	0.555	168	0.445	204	0.488	240	0.516	276	0.435	312	0.555
25	0.492	61	0.511	97	0.436	133	0.556	169	0.443	205	0.492	241	0.511	277	0.436	313	0.556
26	0.497	62	0.507	98	0.438	134	0.557	170	0.441	206	0.497	242	0.507	278	0.438	314	0.557
27	0.502	63	0.502	99	0.439	135	0.557	171	0.439	207	0.502	243	0.502	279	0.439	315	0.557
28	0.507	64	0.497	100	0.441	136	0.557	172	0.438	208	0.507	244	0.497	280	0.441	316	0.557
29	0.511	65	0.492	101	0.443	137	0.556	173	0.436	209	0.511	245	0.492	281	0.443	317	0.556
30	0.516	66	0.488	102	0.445	138	0.555	174	0.435	210	0.516	246	0.488	282	0.445	318	0.555
31	0.521	67	0.483	103	0.447	139	0.554	175	0.434	211	0.521	247	0.483	283	0.447	319	0.554
32	0.525	68	0.479	104	0.450	140	0.552	176	0.434	212	0.525	248	0.479	284	0.450	320	0.552
33	0.529	69	0.474	105	0.453	141	0.550	177	0.433	213	0.529	249	0.474	285	0.453	321	0.550
34	0.533	70	0.470	106	0.456	142	0.547	178	0.433	214	0.533	250	0.470	286	0.456	322	0.547
35	0.537	71	0.466	107	0.459	143	0.544	179	0.433	215	0.537	251	0.466	287	0.459	323	0.544

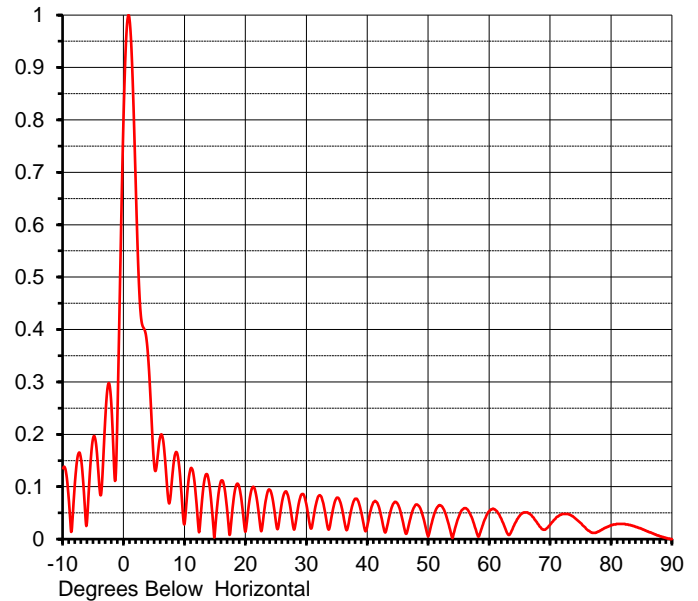
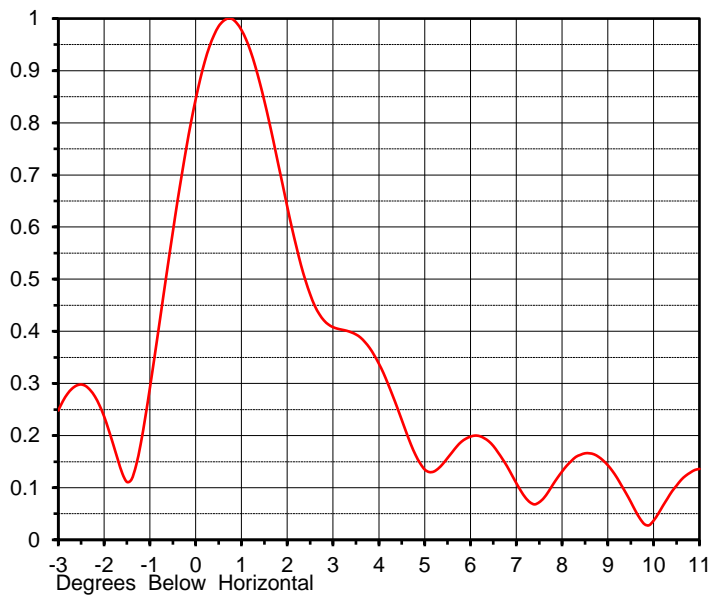
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ELEVATION PATTERN

Proposal No. **c-80028-**
 Date **31-Mar-23**
 Call Letters **NEW**
 Channel **15**
 Frequency **479 MHz**
 Antenna Type **TFU-24ETT/VP-R 04**

RMS Directivity at Main Lobe **20.0 (13.01 dB)**
 RMS Directivity at Horizontal **14.3 (11.55 dB)**
Calculated

Beam Tilt **0.75 deg**
 Pattern Number **24E200075**



Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.135	10.0	0.037	30.0	0.061	50.0	0.008	70.0	0.029
-9.0	0.064	11.0	0.136	31.0	0.035	51.0	0.051	71.0	0.042
-8.0	0.118	12.0	0.051	32.0	0.083	52.0	0.064	72.0	0.048
-7.0	0.147	13.0	0.098	33.0	0.050	53.0	0.039	73.0	0.047
-6.0	0.050	14.0	0.104	34.0	0.040	54.0	0.006	74.0	0.040
-5.0	0.196	15.0	0.027	35.0	0.079	55.0	0.045	75.0	0.030
-4.0	0.093	16.0	0.112	36.0	0.044	56.0	0.059	76.0	0.018
-3.0	0.248	17.0	0.045	37.0	0.040	57.0	0.043	77.0	0.012
-2.0	0.237	18.0	0.079	38.0	0.077	58.0	0.008	78.0	0.015
-1.0	0.291	19.0	0.094	39.0	0.047	59.0	0.032	79.0	0.022
0.0	0.845	20.0	0.019	40.0	0.030	60.0	0.054	80.0	0.027
1.0	0.978	21.0	0.097	41.0	0.071	61.0	0.055	81.0	0.029
2.0	0.639	22.0	0.058	42.0	0.053	62.0	0.036	82.0	0.029
3.0	0.408	23.0	0.054	43.0	0.016	63.0	0.009	83.0	0.027
4.0	0.338	24.0	0.093	44.0	0.063	64.0	0.026	84.0	0.023
5.0	0.135	25.0	0.026	45.0	0.065	65.0	0.046	85.0	0.019
6.0	0.198	26.0	0.076	46.0	0.020	66.0	0.051	86.0	0.014
7.0	0.109	27.0	0.078	47.0	0.040	67.0	0.043	87.0	0.010
8.0	0.131	28.0	0.021	48.0	0.066	68.0	0.028	88.0	0.005
9.0	0.143	29.0	0.083	49.0	0.045	69.0	0.018	89.0	0.002
								90.0	0.000

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